

FLEXIBLE BIO-PROBE ASSEMBLY

STATEMENT OF GOVERNMENT SUPPORT

This invention was made with government support
5 under 2R44NS33427 awarded by the SBIR. The government has
certain rights in the invention.

RELATED PATENT APPLICATIONS

The present application is a continuation of
10 application 10/320,072, ^{now U.S. Pat. No. 6,719,582,} which is a continuation in part of
application 09/653,489, filed August 31, 2000, now U. S.
Patent 6,495,020, which is, in turn, a divisional of
application 09/518,006, filed March 2, 2000, now U.S.
Patent 6,368,147 issued June 25, 2002.

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BACKGROUND OF THE INVENTION

The present invention is a method of making a
flexible brain probe assembly.

Creating a probe that contacts the brain tissue
20 represents a challenge to researchers. Researchers
typically wish to measure electrical activity at specific
sites within the brain that share a well-defined physical
relationship to one another. Probes produced by
photolithographic techniques, such as the probe designed
25 by personnel at the University of Michigan that is known
in the industry and research community as the "University
of Michigan Probe," permit the accurate placement of
electrode sites that are sufficiently small to permit the
measurement of electrical activity at a specific set of
30 predefined sites within the brain. Unfortunately, the
desire to use photolithography has prompted the use of
silicon as a substrate. Because this material is quite
brittle, the use of it creates a risk of breakage inside
the brain, endangering the subject or patient and